

$$\int 0 \cdot dx = C, \quad \int 1 \cdot dx = x + C$$

$$\int x^\mu dx = \frac{x^{\mu+1}}{\mu+1} + C, \quad (\mu \neq -1)$$

$$\int \frac{1}{x} dx = \ln |x| + C$$

$$\int a^x dx = \frac{a^x}{\ln a} + C, \quad \int e^x dx = e^x + C$$

$$\int \sin x dx = -\cos x + C$$

$$\int \cos x dx = \sin x + C$$

$$\int \frac{1}{\sin^2 x} dx = -\operatorname{ctg} x + C$$

$$\int \frac{1}{\cos^2 x} dx = \operatorname{tg} x + C$$

$$\int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + C$$

$$\int \frac{1}{\sqrt{a^2-x^2}} dx = \arcsin \frac{x}{a} + C$$

$$\int \frac{1}{1+x^2} dx = \operatorname{arctg} x + C$$

$$\int \frac{1}{a^2+x^2} dx = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + C$$

$$\int \frac{1}{\sqrt{x^2 \pm a^2}} dx = \ln \left| x + \sqrt{x^2 \pm a^2} \right| + C$$

$$\int \frac{1}{x^2-a^2} dx = \frac{1}{2a} \ln \left| \frac{x-a}{x+a} \right| + C$$